

<b>Course title</b> Zagrożenia cywilizacyjne i rozwój zrównoważony/Civilization risks and sustainable development		<b>ECTS code</b> 7.2.0476	
<b>Name of unit administrating study</b> Faculty of Chemistry			
<b>Studies</b>			
<b>Field of study</b>	<b>Type</b>	<b>Form</b>	
Environmental Protection	Bachelor	Full-time studies	
<b>Teaching staff</b> Dr hab. Roman Cieśliński, prof. UG			
<b>Forms of classes, the realization and number of hours</b>		<b>ECTS credits</b>	
<b>A. Forms of classes, in accordance with the UG Rector's regulations</b> lecture, audytorium classes		classes - 30 h tutorial classes - 2 h student's own work - 18 h TOTAL: 50 h- 2 ECTS	
<b>B. The realization of activities</b> In-class learning			
<b>C. Number of hours</b> lecture 15 h, audytorium classes 15 h			
<b>The academic cycle</b> 2020/2021 winter semester			
<b>Type of course</b> obligatory		<b>Language of instruction</b> Polish	
<b>Teaching methods</b> conversational lecture  exercises using activating methods, practical exercises using cartographic media, case studies, individual projects		<b>Form and method of assessment and basic criteria for evaluation or examination requirements</b>	
		<b>A. Final evaluation, in accordance with the UG study regulations</b> Course completion (with a grade)	
		<b>B. Assessment methods</b> determining the final grade based on partial grades received during the semester	
		<b>The basic criteria for evaluation</b>  Lecture - knowledge and skills consistent with specific learning outcomes - including functional relationships in the environment; threats to the environment and its components; legal, economic and technical instruments for environmental protection and conditions for sustainable development; protected natural objects; rational use of the environment  Exercises - class attendance, timeliness, correctness and completeness of the exercises performed, in accordance with the accepted principles of their preparation, originality of the proposed solutions	
<b>Required courses and introductory requirements</b>			
<b>A. Formal requirements</b> has general knowledge in the field of ecology and geography			
<b>B. Prerequisites</b> has knowledge of environmental components, basic physical and geographical phenomena, divisions and organization of the biosphere, basic concepts in the field of ecology			

### **Aims of education**

- 1 - learning the main assumptions of the concept of sustainable development
- 2 - emphasizing the importance of the proper state of the natural environment for the civilizational development of the country
- 3 - learning the importance of environmental, social and economic conditions for sustainable development
- 3 - learning about threats to the natural environment and the importance of human-environment relations
- 4 - identification of the effects of anthropopression and their impact on the natural and socio-economic subsystem of the environment
- 5 - learning the basic principles of rational use and development of the environment

### **Course contents**

#### **A. Problems of the lecture**

- A.1. The concept of sustainable development and its evolution
- A.2. Basic components of the natural environment and their anthropogenic threats, effects of human impact on the environment, ways of counteracting threats - global and local perspective
- A.3. Resources and assets of the natural environment and their importance for sustainable development. Barriers and environmental restrictions.
- A.4. The functioning of natural and man-made natural systems
- A.5. Methods, instruments and tools for environmental protection
- A.6. Problems of landscape protection and shaping
- A.7. Nature protection - concepts, forms
- A.8. Basic principles of rational management in the environment in terms of the presence of high civilization pressure

#### **B. Exercise issues**

- B.1. Types and forms of environmental degradation
- B.2. National conditions for sustainable development
- B.3. Analysis of the state of the natural environment of the country and the region in the zoological aspect. Problem studies.
- B.4. Nature and landscape protection - forms, formal and legal regulations, successes in the field

### **Bibliography of literature**

#### **A. Literature required to pass the course**

##### **B. Literature required for the final passing of classes (passing the exam):**

##### **A.1. used during classes**

- Dobrzańska B., Dobrzański G., Kielczewski D., 2008, Ochrona środowiska przyrodniczego, PWN, Warszawa
- Environmental Protection, statistical yearbooks, Central Statistical Office, Warsaw
- The Act on nature protection from 16.IV.2004 (Journal of Laws No. 92, item 880) and the Act on the protection of monuments and the protection of monuments from 23. VII. 2003 (Journal of Laws No. 162, item 1658)

##### **A.2. studiowana samodzielnie przez studenta**

##### **A.2. studied independently by the student**

- Bartkowski T., 1981, Kształtowanie i ochrona środowiska, PWN, Warszawa-Poznań.
- Odum E P., 1982, Podstawy ekologii, Państwowe Wydawnictwo Rolnicze i Leśne, Warszawa.
- Pullin A S., 2004, Biologiczne podstawy ochrony przyrody, WN PWN, Warszawa.

#### **B. Extracurricular readings**

##### **Literatura uzupełniająca**

##### **B. Supplementary literature**

- legal acts regarding environmental protection, among others Environmental protection law (2001, as amended), Water law (2001, as amended)

- Meadows D.H., Meadows D.L., Randers J., 1995, Przekraczanie granic. Globalne załamanie czy bezpieczna przyszłość? Uniwersytet Warszawski, Polskie Towarzystwo Współpracy z Klubem Rzymskim, Warszawa.